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IN THE DRAWINGS:

Please replace original Figure 7 with the attached replacement sheet for Figure 7.

REMARKS

Status Summary

Claims 1-57 are pending in the present application. In this Amendment, no claims are added, and no claims are canceled. Therefore, claims 1-57 remain pending.

Amendments to Specification and Drawings

The specification and drawings are amended to correct informalities without adding any new matter.

Claim Rejections Under 35 U.S.C. § 102

Claims 1, 5, 12-14, 17-20, 24-27, 29, 35, 37-39, 43, 50, 51, and 54-57 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,161,012 to Fenton et al. (hereinafter, "Fenton"). This rejection is respectfully traversed.

Independent claim 1 recites a method for triggerless mobile group dialing. The method recited by claim 1 includes intercepting a call signaling message for a call directed to a mobile dialing code used to identify a called mobile subscriber within a mobile dialing group. The method also includes determining a called party address based on the mobile dialing code. For example, referring to Figure 1 of the present application, signal transfer point (STP) 100 intercepts a message including a mobile dialing code and determines a mobile dialing group ID. (Specification, page 9, lines 9-22.) In this example, the full E.164 MSISDN number of the called mobile subscriber is extracted based on the mobile dialing code. (Specification, page 9, lines 9-22.) Further,

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the method includes replacing the mobile dialing code in the message with the called party address and routing the call signaling message to its intended destination. Referring again to Figure 1, STP 100 inserts the extracted full E.164 MSISDN number of the called subscriber in the SCCP called party address and MAP MSISDN parameter of the message and forwards the modified SRI message to home location register (HLR) 108. (Specification, page 9, lines 14-17.)

As discussed in the background section of Applicants' specification, performing group code translation at a PBX or end office that requires suspension of call processing is known. In claim 1, the steps for triggerless mobile group dialing are performed at a signaling message routing node. In addition, the mobile dialing code in the message is replaced with the called party address and the message is routed to its intended destination. Replacing the mobile dialing code in the message and routing the message to its intended destination eliminates the need or triggers to be provisioned at end offices, for call processing to be suspended by the end office, or for queries and responses to databases in order to translate group codes.

There is absolutely no disclosure, teaching, or suggestion in Fenton of performing any steps at a signaling message routing node, not to mention translating a mobile dialing code in a message to a called party number, replacing the mobile dialing code in the message with the called party number or routing the message to its intended destination. According to Fenton, short codes are processed by the mobile switching center and the VLR to determine whether a user is permitted to dial a short code. For example, Fenton states:

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Prior to routing the call, the mobile switching center MSC1 refers the calling data to the visitor location VLR1 where the identity of the dialing station MS1 is authenticated by use of the IMSI and the secret key. The short code in the calling data is then compared with a permitted list of short codes to determine whether the user is permitted to make the call. If the user is permitted to make the call, the visitor location register VLR1 signals to the mobile switching center MSC1 that the call can be routed to a destination corresponding to the short codes; in this instance PAD/PH1. (See column 4, lines 50-60 of Fenton.)

In this passage, Fenton indicates that the MSC suspends call processing and queries the VLR to process a short code. There is absolutely no teaching or suggestion of performing any steps at a signaling message routing node, translating the short code into a called party number, replacing the short code in a received signaling message with the called party number, or routing the received message to its destination. Accordingly, for this reason alone, the rejection of claim 1 and its dependent claims as anticipated in Fenton should be withdrawn.

On page 2 of the Official Action, the Examiner indicates that column 6, lines 25-33 of Fenton disclose the steps recited in claim 1. Column 6, lines 25-33 of Fenton are as follows:

Also, instead of each private network having a common short code for all users, each user may have his own set of short codes, which are individually interpreted by the network (HLR/VLR/MS) to provide access to predetermined dialled stations, such as a private network, or dialled stations accessible by longer dialled codes in which case the Mobile Switching Centre (MSC) appropriately produces the longer dialled code.

The above-quoted passage from Fenton indicates that short codes can correspond to dialled stations. However, there is no teaching or suggestion of replacing a short code in a received signaling message, routing any signaling messages to a destination, or

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performing such steps at a signaling message routing node. In contrast, the above-quoted passage from Fenton indicates that the HLR, VLR, and MSC are used to interpret short codes. HLRs and VLRs are databases that originate messages, terminate queries and provide responses. Neither routes signaling messages. Similarly, MSCs initiate signaling messages and receive responses, rather than routing signaling messages. Accordingly, for this additional reason, the rejection of claim 1 and its dependent claims as anticipated by Fenton should be withdrawn.

Independent claim 20 recites a signaling message routing node for triggerless mobile group dialing. Independent claim 20 has been amended to recite that the communications module, the triggerless mobile dialing code translation function and the mobile dialing code database are located in the signaling message routing node. In addition, claim 20 has been amended to include a routing function in the signaling message routing node that routes the call signaling messages with the called addresses to their intended destinations. Support for this amendment is found, for example, in Figure 6 of the present specification where mobile dialing code translation function **628**, LIM **600**, and DCM **602**, mobile dialing code database **102** or **102A**, and routing function **616** are components of STP **100**. The corresponding description appears on page 20, lines 13-23 of the present specification. In claim 20, the communications module sends and receives signaling messages and intercepts signaling messages relating to calls directed to mobile subscribers and requiring triggerless mobile dialing group processing. The triggerless mobile group translation function receives the signaling messages requiring triggerless mobile dialing group processing and translates dialing codes in the

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signaling messages to called party addresses based on the mobile dialing groups associated with the signaling messages. The mobile dialing code database includes data accessible by the triggerless mobile dialing code translation function for translating the mobile dialing codes to called party addresses. The routing function routes the call signaling messages with the called party addresses to their intended destinations. Thus, in independent claim 20, the signaling message routing node intercepts signaling messages requiring triggerless mobile group dialing, translates the mobile dialing codes in the signaling messages to called party addresses and routes the signaling messages to their intended destinations.

As stated above, there is absolutely no disclosure, teaching or suggestion in Fenton of any actions being performed at a signaling message routing node. In contrast, Fenton indicates that all processing of dialing codes is performed at either an MSC, a VLR, or an HLR, none of which is a signaling message routing node. In addition, Fenton fails to disclose routing received signaling messages whose mobile dialing codes have been translated to called party addresses. As stated above, the short code processing in Fenton is query- and response-based. Accordingly, it is respectfully submitted that the rejection of claim 20 and its dependent claims as anticipated by Fenton should be withdrawn.

Independent claim 39 recites a computer program product comprising computer executable instructions for performing steps that include intercepting a call signaling message relating to a mobile dialing code, determining a called party address based on the mobile dialing code, replacing the mobile dialing code with the called party address

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and routing the call signaling message to its intended destination. Independent claim 39 has been amended to recite that the steps are performed at a signaling message routing node.

As stated above with regard to the rejection of the claim 1, Fenton fails to disclose any steps performed at a signaling message routing node. Moreover, Fenton fails to teach or even remotely suggest replacing a dialing code in a message with a called party address and routing a call signaling message to its destination. Rather, Fenton discloses that all processing of mobile dialing codes is performed at an MSC, an HLR, or a VLR. None of these nodes comprise a signaling message routing node. Accordingly, it is respectfully submitted that the rejection of claim 39 and its dependent claims as anticipated by Fenton should be withdrawn.

Claim Rejections under 35 U.S.C. § 103

Claims 11, 16, 49, and 53 were rejected as unpatentable over Fenton. This rejection is respectfully traversed.

Claims 11 and 16 depend from claim 1. Claims 49 and 53 depend from claim 39. As stated above with regard to the rejection of claims 1 and 39, Fenton fails to teach any steps being performed at a signaling message routing node, not to mention intercepting a call signaling message, translating a mobile dialing code in a signaling message to a called party address, replacing the mobile dialing code with the called party address, or routing a signaling message to its intended destination. Rather, Fenton indicates that the MSC sends a query to the VLR to determine whether a short

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code corresponds to an allowed short code. The VLR responds to the MSC. The MSC routes the call to a private data network. An MSC is a node that originates queries, receives, responses, and that initiates call setup messages. A VLR is a database node that responds to queries from the MSC and that communicates with a subscriber's HLR. Neither of these nodes is a signaling message routing node. Accordingly, the rejection of claims 11, 16, 49, and 53 as unpatentable over Fenton should be withdrawn for this reason alone.

On page 8, the Official Action states:

The primary examiner takes OFFICIAL NOTICE that an STP is used to route calls and is a component of an AIN-enabled phone network. Fenton teaches an Intelligent network (C6, L39-44).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Fenton, such that intercepting a call signaling message includes intercepting a call signaling message addressed to the STP, to provide means for Fenton's invention to be modified and used within an intelligent network as he describes support for in his disclosure.

The above-quoted paragraph from the Official Action indicates that because an STP is known, and Fenton teaches an intelligent network, it would have been obvious to modify Fenton to include an STP that intercepts call signaling messages, translates short codes, and replaces the short codes with called party addresses as claimed in claims 1 and 39. Applicants respectfully disagree. If an STP were added to the intelligent network of Fenton, the STP would simply route messages between the MSC, the VLR, and the HLR. The fact that an STP is used to route messages in an intelligent network has nothing to do with intercepting call signaling messages, translating short codes in

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the messages to called party addresses, and replacing the short codes with the called party addresses. Moreover, Applicants respectfully submit that Fenton and the IN architecture teach away from intercepting call signaling messages, replacing the short codes, and routing the call signaling messages because both Fenton and the IN architecture are query- and response-based. Accordingly, for these additional reasons, the rejection of claims 11 and 49 as unpatentable over Fenton should be withdrawn.

Claims 2-4 and 40-42 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fenton in view of U.S. Patent Application Publication No. US 2002/0115441 to Alonso et al. (hereinafter, "Alonso"). This rejection is respectfully traversed.

Claims 2-4 depend from claim 1. Claims 40-42 depend from claim 39. As stated above with regard to the rejection of claims 1 and 39 as anticipated by Fenton, Fenton fails to teach or even remotely suggest any processing of call signaling messages including short codes at a signaling message routing node. Alonso likewise lacks such teaching or suggestion. Alonso is directed to a method and apparatus for presentation of a calling subscriber number in a mobile network. According to Alonso, GMSC N-101 receives an IAM message and formulates an SRI or location request message. (See Figures 6 and 7 of Alonso.) The abbreviation "GMSC" stands for gateway mobile switching center. A gateway mobile switching center is a switch in a mobile communications network that originates and terminates IAM messages, formulates SRI messages, and formulates location request messages. A GMSC is not a signaling message routing node as claimed in claims 1 or 39. Similarly, the GMSC of Alonso does not perform any of the steps for processing signaling messages that contain

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mobile dialing codes as claimed. Accordingly, it is respectfully submitted that the rejection of claims 2-4 and 40-42 as unpatentable over Fenton and in view of Alonso should be withdrawn.

Claims 15 and 22 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fenton in view of U.S. Patent No. 6,076,121 to Levine (hereinafter, "Levine"). This rejection is respectfully traversed.

As a preliminary matter, it is respectfully submitted that the rejection of claim 22 in the fourth full paragraph on page 10 of the Official Action should be of claim 52, as recited in the fifth full paragraph. Applicants' remarks below address the rejection of claim 52.

Claim 15 depends from claim 1, and claim 52 depends from claim 39. As stated above with regard to the rejection of claims 1 and 39 as anticipated by Fenton, Fenton fails to teach or suggest performing any steps at a signaling message routing node, not to mention intercepting a call signaling message, translating a mobile dialing code in a call signaling message into a called party address, replacing the mobile dialing code with the called party address, or routing the call signaling message. Levine likewise lacks such teaching or suggestion. Levine is directed to a method where directory numbers and functional property codes are assigned to subscribers so that the directory number combined with the functional property code can be used to reach the subscriber's voice line, cellular line, fax line, etc. (See Abstract of Levine.) There is absolutely no teaching or suggestion in Levine of performing any processing at a signaling message routing node, not to mention the steps of intercepting call signaling

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messages, translating mobile dialing codes in the call signaling messages, replacing the mobile dialing codes in the call signaling messages, or routing the call signaling messages. Accordingly, it is respectfully submitted that the rejection of the claims as unpatentable over Fenton in view of Levine should be withdrawn.

Claims 21, 22, 31-34, and 36 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fenton in view of U.S. Patent No. 6,055,302 to Schmersel et al. (hereinafter, "Schmersel"). This rejection is respectfully traversed.

Claims 21, 22, 31-34, and 36 depend from claim 20. As stated above with regard to the rejection of independent claim 20 as anticipated by Fenton, Fenton fails to teach or even remotely suggest a signaling message routing node with a communications module, a triggerless mobile dialing code translation function, a mobile dialing code database, and a routing function that receives signaling messages that require triggerless mobile dialing group processing, translates mobile dialing codes in the signaling messages to called party addresses, and routes the signaling messages to their destinations. Schmersel likewise lacks such teaching or suggestion. Schmersel is directed to methods for processing non-call related messages at a service control point (SCP) (see column 5, lines 66 through column 6, line 15 and column 6, lines 40-45 of Schmersel.) As stated above, a service control point is a node in the telecommunications network that responds to queries. There is absolutely no teaching or suggestion in Schmersel of a signaling message routing node that performs the processing of call signaling messages that include mobile dialing codes as claimed in

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claim 20. Accordingly, it is respectfully submitted that the rejection of claims 21, 22, 31-34, and 36 as unpatentable over Fenton in view of Schmersel should be withdrawn.

Allowable Subject Matter

Claims 6-10, 23, 28, 30, and 44-48 were objected to as being dependent upon a rejected base claim but were indicated as allowable if rewritten in independent form.

Claims 6-10 depend from claim 1. Claim 1 is believed to be patentable over the references cited in the Official Action for the reasons stated above. Accordingly, claims 6-10 have not be rewritten in independent form at this time.

Claims 23, 28, 30, 44, 47, and 48 have been rewritten in independent form to include all of the limitations of the base claim and any intervening claims. Claims 45 and 46 depend from claim 44. Accordingly, it is respectfully submitted that claims 23, 28, 30 and 44-48 should now be allowed.

CONCLUSION

In light of the above amendments and remarks, it is respectfully submitted that the present application is now in proper condition for allowance, and an early notice to such effect is earnestly solicited.

If any small matter should remain outstanding after the Patent Examiner has had an opportunity to review the above Remarks, the Patent Examiner is respectfully requested to telephone the undersigned patent attorney in order to resolve these matters and avoid the issuance of another Official Action.

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DEPOSIT ACCOUNT

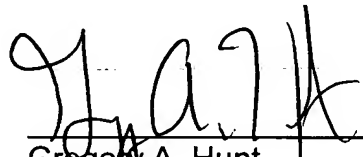
The Commissioner is hereby authorized to charge any fees associated with the filing of this correspondence to Deposit Account No. 50-0426.

Respectfully submitted,

JENKINS, WILSON & TAYLOR, P.A.

Date: October 13, 2005

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